

Figure 1

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//
Submission no   :    1
exon 1         :    <..672
start codon     :    381..383
intron 1       :    673.
Remarks        :    no consensus splice site intron 1
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tttttttaacg ttctctttttt tttcgagtgg tgactggatg ctgattcttc      50
ctcgtattttt tgctgctttct ctctccctcc cctccttccc gggcccgggc      100
ccgccccgca cctccttcc gccctcctt ctccggggtc agccaggaag      150
atgtcccagag ctgctatccc cggctcggcc cgggcagccg ccttctgagc      200
ccccgaccg agcgccgagc cgcgcgcga tgggctgggc cgtggagcgt      250
ctccgcagtc gtagctccag ccgcgcgct ccagccccg gcagcctcag      300
catcagcggc ggcggcggcg gcggcggcgt cttccgcac gttcgccgca      350
gcgtaaccgg agccctttgc tctttgcaga ATGGCCCGCT TCGGAGACGA      400
GATGCCGGCC CGCTACGGGG GAGGAGGCTC CGGGGCAGCC GCCGGGGTGG      450
TCGTGGGCAG CGGAGGCGGG CGAGGAGCCG GGGGCAGCCG GCAGGGCGGG      500
CAGCCCGGGG CGCAAAGGAT GTACAAGCAG TCAATGGCGC AGAGAGCGCG      550
GACCATGGCA CTCTACAACC CCATCCCCGT CCGACAGAAC TGCCTCACGG      600
TTAACC GGTC TCTCTTCCTC TTCAGCGAAG ACAACGTGGT GAGAAAATAC      650
GCCAAAAGAT CACCGAATGG CCatatacctt ttgcccgaac cccagcagca      700
gctgcgcctc cccctcctcc ctccgcctcc cctcttcag gctgggagag      750
agaccggggg gttgatggga ggtggggagg aggggggtct tccaggggct      800
gggagagggg gcaccgggag gagtgtgaaa gaatctctcc accccgagct      850
gggttgagct accctggagg cttgggaatg ggtttttcgg gggctggggg      900
ccggccagcc ggagagtgga tccttcccaa ggaccgactc tagaatgaga      950
tct                                                    953
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//
Submission no      :      2
Intron 1          :    <..88
Exon 2            :    89..194
Intron 2          :    195..>
Remarks          :    No consensus splice site intron 1
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gatcttttycc	actgggggtca	gtggggggtgg	gtgcacctcc	aacacccttc	50
ttttcttttga	acaagattttt	tccttaattc	cccaataacTC	CCTTTGAATA	100
TATGATTTTA	GCCACCATCA	TAGCGAATTG	CATCGTCCTC	GCACTGGAGC	150
AGCATCTGCC	TGATGATGAC	AAGACCCCGA	TGTCTGAACG	GCTGgtgagt	200
gatgtctttt	ctcaggggtct	tctccttggc	tttagcagga	cattaatttt	250
tggggggagt	gagcagggca	cagaggaggc	tctcagtcct	ggagcccaga	300
gccagatcat	gggaagccta	aatttccttt	tcattttttc	ttgaaccaga	350
gtctcgctct	gtcaccacag	ctggagtgc	gtgggttcagt	catagctcac	400
tgcagcctcc	acctcctggg	ctcaagccat	cctcccactg	cagcctcctg	450
agtagcaggg	actaacaggt	gccaccatgc	ccagttaatt	ttcttatttt	500
tatctttttt	tgtaagaaga	tggggat			527

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Submission no : 3
Intron 2 : <..57
Exon 3 : 58..197
Intron 3 : 198..>

gatcttgtca	acatctgccc	agcccaagac	gctgaccttg	ccttctctcc	50
cttccagGAT	GACACAGAAC	CATACTTCAT	TGGAATTTTT	TGTTTCGAGG	100
CTGGAATTAA	AATCATTGCC	CTTGGGTTTG	CCTTCCACAA	AGGCTCCTAC	150
TTGAGGAATG	GCTGGAATGT	CATGGACTTT	GTGGTGGTGC	TAACGGGgta	200
agtggcgcg	gctatacgct	ttggatttaa	ctagctgaag	gattacgagg	250
cttttggttg	gtgtggtccg	ggccaggctc	aggaaggctg	agcccttgtg	300
ttctccctcc	ccttgttatg	cgcctgcctc	ctttctgcca	acaccccacc	350
tccatgtctc	agctgtatat	tacagcagat	gctttctgtt	acaattaaaa	400
taatagctca	ttattgttgg	ctgcttccag	agtgccttat	g	441

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Submission no : 4
Intron 3 : <..142
Exon 4 : 143..234
Intron 5 : 235..>

aaaactgagg	ccagtgggtgt	cgagtcacct	gcctgtgggc	acccaaccaa	50
tacaggacag	cttggaatcc	caagcacccc	cgccctgctg	tctgaccccc	100
aaaacccacc	ctctgttctc	cattctggct	tctttctttc	agCATCTTGG	150
CGACAGTTGG	GACGGAGTTT	GACCTACGGA	CGCTGAGGGC	AGTTCGAGTG	200
CTGCGGCCGC	TCAAGCTGGT	GTCTGGAATC	CCAAgtgcgt	gagtttccga	250
ccctgacaa					259

11

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Submission no      :      5
Intron 4           :      <..118
Exon 5             :      119..271
Intron 5           :      272..>
```

cttaatat	cctcaggaac	acacctgctt	tgtctgggag	agacctgggc	50
gtctctgttg	cgggggtttt	ggggtacttg	ctcatgggct	tatggggcct	100
ctctctgtgt	ccccccagGT	TTACAAGTCG	TCCTGAAGTC	GATCATGAAG	150
GCGATGATCC	CTTTGCTGCA	GATCGGCCTC	CTCCTATTTT	TTGCAATCCT	200
TATTTTTTGCA	ATCATAGGGT	TAGAATTTTA	TATGGGAAAA	TTTCATACCA	250
CCTGCTTTGA	AGAGGGGACA	Ggtaggtcca	cggagcatga	tgcattcttc	300
cagttttctc	cttcagggaac	aagctcttgg	gaggattagg	caggggtgtg	350
cttctttctc	ctggcagctg	ggaggaccgt	ctccttcaga	gagcactac	399

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Submission no : 6
Intron 5 : <..22
Exon 6 : 23..216
Intron 6 : 217..>

ttttttccct	tcccttttgt	agATGACATT	CAGGGTGAGT	CTCCGGCTCC	50
ATGTGGGACA	GAAGAGCCCG	CCCGCACCTG	CCCCAATGGG	ACCAAATGTC	100
AGCCCTACTG	GGAAGGGCCC	AACAACGGGA	TCACTCAGTT	CGACAACATC	150
CTGTTTGCAG	TGCTGACTGT	TTTCCAGTGC	ATAACCATGG	AAGGGTGGAC	200
TGATCTCCTC	TACAATgtaa	gtgatgctgg	gacagtgtgt	gtggacaatc	250
agagtctcag	ggaggtggcc	tcctgggacc	agtgagactc	caaggctgca	300
atggagggac	cctgagctgg	gaaaggcagc	ccaaggacaa	cacagcccca	350
ctgaagctgg	cctgaggctc	aggcttttga	agattacagg	ggctcatgag	400
cagaactcta	actatagggc	atagaagtct	ggagggcccc	cagatgcaac	450
atcatttttc	attgtgcaag	tgtttagata	taattttaga	tttttgaata	500
cggaagggtt	atgtgatcca	aaatccaaca	cagataaaaag	atagagtaat	550
atcttttgac	gtaggcgagg	ggccctgcc	ctgagg		586

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Submission no : 7
Intron 6 : <..183
Exon 7 : 184..287
Intron 7 : 288..>

tttcttcaga	aaacgggtcc	ttcctccatt	tccccctctg	ggatgccaga	50
gccccagAAC	tccacaagcc	aagaacattt	aagacagagc	cacaagagaa	100
ccgagcttcc	ccttccctca	cctgtcaggt	tctatctgag	tcccagtcaa	150
ctctcacctg	ctttccctcc	tcacacccta	cagAGCAACG	ATGCCTCAGG	200
GAACACTTGG	AACTGGTTGT	ACTTCATCCC	CCTCATCATC	ATCGGCTCCT	250
TTTTTATGCT	GAACCTTGTG	CTGGGTGTGC	TGTCAGGgta	agtttctgct	300
actccccacc	ccatcccact	cactcctctt	tgctaacttc	tttccaagta	350
gaggccattg	aagctttggt	ttcattcact	agacaga		387

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Submission no : 8
Intron 7 : <..190
Exon 8 : 191..306
Intron 8 : 307..>
Sequence : 412
Remark : intron 7 contains CA-repeat (D19S1150)

cccagtccttt	tcccagaagt	cctgactcct	cctggtgaaa	actcctgacc	50
tccagggact	tctgaatccc	caaacacaca	cacacacaaa	cacacacaca	100
cacacacaca	cacacacaca	caaacacaca	cacaaacgtt	tcctaacatt	150
tt.aaaacag	ccatactctg	gcttttctat	gcttctccag	GGAGTTTGCC	200
AAAGAAAGGG	AACGGGTGGA	GAACCGGCGG	GCTTTTCTGA	AGCTGAGGCG	250
GCAACAACAG	ATTGAACGTG	AGCTCAATGG	GTACATGGAA	TGGATCTCAA	300
AAGCAGgtga	ggccctttca	tcctggggcc	cagggatgga	gatcccaggc	350
cacagagtac	aaagagagtc	atgcagtttg	gagaaggcta	agctgggagg	400
gttatgatgg	ga				412

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Submission no : 9
 Intron 8 : <..513
 Exon 9 : 514..570
 Intron 9 : 571..>

gagtaggaag	ttagaggcag	ggtgggcagg	gaaggcttct	ctaaggaagt	50
accctctgag	cagagagacc	tgaaggacgt	gaagaaggaa	gctgtgggga	100
tgtcaaggga	aggggcattc	caggcagaga	cagcaagtgc	aaaggccctg	150
agctaggaac	gtatttgaga	cacagcaagg	aagccagtgc	agctgaaaca	200
gagtgaagag	tggggacagc	tggaggagag	gaagacagga	aggtgatgga	250
gatcagatca	agcaggggct	tataggctgt	ggtgtggaca	ttggttttta	300
ttttgcgcga	ggtggggaga	atgttggcta	ttgctactgt	tcgaggaggtg	350
gggcttgaag	tcacaaacca	cccagcagca	tgttttttgg	tcggttgagc	400
tgtcaccatc	agtcagcaga	gaatgggggt	ggccgggcag	acccttcttc	450
ctggtccaag	ggagaactca	tcctccaaat	gcaggagctt	aactctgtgc	500
tcctcctctt	cagAAGAGGT	GATCCTCGCC	GAGGATGAAA	CTGACGGGGA	550
GCAGAGGCAT	CCCTTTGATG	gtaactgctc	taaaccacc	tcaggggtgg	600
gtcccagggg	a				611

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Submission no : 10
 Intron 9 : <..86
 Exon 10 : 87..179
 Intron 10 : 179..>

ttaatccaag	acacactgtg	tgtcctatat	ggctctgtgtt	cgaaaaaggg	50
taacgtcttt	ttctcttgcc	atgtttccat	tgtagGAGC	TCTGCGGAGA	100
ACCACCATAA	AGAAAAGCAA	GACAGATTTG	CTCAACCCCG	AAAGAGGCTGA	150
GGATCAGCTG	GCTGATATAG	CCTCTGTGGg	tgagtcctt	cctctgccac	200
ctatcagttg	ttcatcacct	atcgcccaag	agacatggtg	gggtgggggc	250
agagggcttg	caaaccgtgc	tgctggatt	tggtctcag	ctccaccctt	300
tcccacctgt	gcgtgtgtcc	tgggcagatt	acatcattat	gggaataaca	350
tccgtgccta	gcttctcatt	atgttggtgg	aattcaacta	aatgatcccc	400
atgaagcatg	gcaaaccagc	acctggcagg	gacgaagctc	ccagtcaagt	450
tggtgaatgt	ttgtgactca	tccgggaagt	atcatggggg	acctgcttat	500
attaggtgct	tggttgcaaa	caaacaaggc	agtcacgagg	ctgagctggg	550
aggatcactt	gagcctggga	agtggaggct	gcaataagcc	attattgtgt	600
tactgcactc	cagcctggca	cagaaaaaaaa	aaaaaaaaanac	aaactgagcc	650
agcaca					656

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Submission no : 11
 Intron 10 : <..450
 Exon 11 : 451..660
 Intron 11 : 661..>

gatcacttct	aaagttaa	at	gc	catg	ggga	aaacag	tctc	atccac	atct	50
ctttctggag	gccttcca	ag	cgtg	ctcc	at	gcag	ctct	tg	cctg	100
tgcatcaggg	aatggagg	ct	tg	cttt	atc	ctg	ccct	gtg	gact	150
cagaggcatc	agatgtgg	ct	gg	agt	ggga	gacat	ggaaa	att	ggct	200
gcaacagaga	actatcag	cc	ttcc	cat	caa	ttg	gtt	act	t	250
tat	ttttcag	ggg	cact	gtc	ttct	cata	ag	ctcc	atct	300
g	cccatg	gggt	cat	gat	gggt	ccct	cagg	cc	agagg	350
aat	ggatccc	ctg	gcta	aaaa	tct	gtg	cttg	gg	ctgc	400
ctt	ctgaagg	aac	agc	ctga	gc	ctga	catt	ctcc	atct	450
GTTCTCCCTT	CGCCCGAGCC	AGCATTA	AAAA	GTGCCA	AGCT	GGAGA	ACTCG			500
ACCTTTTTTC	ACAAAAAGGA	GAGGAGG	ATG	CGTTT	CTACA	TCCGCC	GCAT			550
GGTCAAAACT	CAGGCCTTCT	ACTGGAC	TGT	ACTCAG	TTTG	GTAGCT	CTCA			600
ACACGCTGTG	TGTTGCTATT	GTTCACT	ACA	ACCAG	CCCGA	GTGGCT	CTCC			650
GACTTCCTTT	gtgagtat	ca	ccc	agcccc	ccc	ctg	ccaa	ctcc	ctgat	700
cctccctcac	accctttttc	cacttctctt	tctctg	gtag	tat	gtgt	atc			750
ttc	tttggtc	ctcatt	gaat	ctg	ccct					778

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Submission no : 12
 Intron 11 : <..323
 Exon 12 : 324..436
 Intron 12 : 437..>

gatcacttgt	ggccaggagt	tcaagancag	ccagggcaac	atagtgagga	50
cccccatctc	cacattaaaa	attttaaaaa	gaaaaaagat	aagtcagaag	100
ttgggtgtgg	tgacacatgc	ctgtagtctt	agcatgttgg	aggccaaatc	150
agggaaactg	tttgaggcca	ggagtttgaa	accagcctaa	cagcatagca	200
agacctcatc	tctacaaaaa	ataaaaagtt	taaaaatgat	aataaaaagga	250
aagtcagagc	cacctggaac	ccctaccctc	agcaagccta	acctcctctc	300
tgtttcctcc	ttctcccttc	tagACTATGC	AGAATTCATT	TTCTTAGGAC	350
TCTTTATGTC	CGAAATGTTT	ATAAAAATGT	ACGGGCTTGG	GACGCGGCTT	400
TACTTCCACT	CTTCCTTCAA	CTGCTTTGAC	TGTGGGgtaa	gtgctcttgt	450
ttctaagagt	tcatttctcc	agctcttgcc	tggaatgaca	gataacctgga	500
cacattaaag	ggagaaaggt	aaagtcaccc	ctgaatatga	gagactcaga	550
tggatgcaga	aggaatgaga	aaacaatcca	aacactggca	aggatacagt	600
gtaccacagaa	ccctcaacca	ccgcca			626

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Submission no : 13
 Intron 12 : <..545
 Exon 13 : 546..658
 Intron 13 : 659..821
 Exon 14 : 822..953
 Intron 14 : 954..>

gacnngncat	gcacaccagc	ctgggtgata	agagcaagac	tcctctcaaa	50
ataaatgaat	aaataaaaaat	aaataaataa	ataagaggcc	gggtgcagtg	100
gctcaatgct	ttggaaagtg	gaggccaaca	gttggagaga	ccaaagcagg	150
aggatggctt	cagcccagaa	gtttgaggcc	mgcctgggca	atactagcga	200
gacactatct	ctataaaaaat	gttttaaaat	tagccagatg	tgggtggggca	250
cacctgtaat	cccagctact	caagaggctg	agggtgggagg	atcacttaag	300
cccaggagga	cagtgcctgca	gtgagctatg	attgcgcccc	ctgcactcca	350
gcctgggtga	cacagtgaga	cccgggtctct	atagataaat	gaatggatga	400
atgagggggg	caaggatcct	caccgggctt	ccatttggag	ggaggagtgt	450
ggttgagtgc	ttgcaagggt	ggtacctagg	aaatgcttgc	cagttctgga	500
gcccagacac	tgtccctgga	catgagacca	ggttctctgc	cctagGTTAT	550
CATTGGGAGC	ATCTTCGAGG	TCATCTGGGC	TGTCATAAAA	CCTGGCACAT	600
CCTTTGGAAT	CAGCGTGTTA	CGAGCCCTCA	GGTTATTGCG	TATTTTCAAA	650
GTCACAAAgt	aagtcttttg	ggttccttga	catttgtaca	gggggtgggg	700
atgggggaca	tgggtggggcc	gcctccagaa	agttgggaaa	gtgagcctcg	750
tgttttcgagg	gctgactccg	gggcctgcct	wccccgcctg	gcctgagtc	800
tcgcctggsc	tctgtcggca	gGTACTGGGC	ATCTCTCAGA	AACCTGGTCG	850
TCTCTCTCCT	CAACTCCATG	AAGTCCATCA	TCAGCCTGTT	GTTTCTCCTT	900
TTCTGTTC	TTGTCTCTT	CGCCCTTTTG	GGAATGCAAC	TCTTCGGCGG	950
CCAgtaaagtc	cttcacagga	attcaa			976

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Submission no : 14
 Intron 14 : <..201
 Exon 15 : 202..274
 Intron 15 : 274..>

ccctccacgt	gcaggtctgcc	ttccctcgtag	cccagacacc	cattttgcggt	50
cacccaaatg	ggcagggccc	tgggtaccac	tcaggggtttc	ctggggacag	100
agatgatgga	aacgttcgtt	tccttggaga	tgagatactg	agccacaccc	150
tcagagcacc	ccgggtgggg	ccaacgtgaa	atgtctgtgt	cctccctgca	200
gGTTTAATTT	CGATGAAGGG	ACTCCTCCCA	CCAAC TTCGA	TACTTTTCCA	250
GCAGCAATAA	TGACGGTGTT	TCAGgtacag	cctccacctg	gccccacggg	300
ccaacacctc	tcagtgtcac	agatgaaagt	gcctgctcca	catccaaggg	350
gcttccctga	actcctcctt	ctctacctgg	ccttttcaca	ccactttgaa	400
acacagatgt	tatggttatc	attattcaat	tatggtgagg	ccaacagatc	450
aggagatgaa	tgtcattgga	aagatagttt	gtggctgggc	acggtggctc	500
acacccataa	tcccagcact	ttggccaggt	acggtggctc	acacctgtaa	550
tcccaacgct	ttgggaagcc	caggtgggcgg	atcacttga	gatcaggaat	600
tcgagaccag	cctggccaan	atggtgaaac	cccattctcta	ctaaaaatac	650
aaaaattagc	cgggcgtggt	agcacatgcc	tgtaatccca	gctactcggg	700
agatgaggca	caagaattgc	ttgaacctgg	gaggcagagg	ttgcagtgag	750
ccaagatcgc	cccactgcac	tcmagcctgg	gcaacagagt	gagactccat	800
ctcaaaaaag	caaaaagaaaa	aaaaaaccac	tttgggaggt	caagatggga	850
ggactacttg	aggccaggag	tttgagacaa	gtctgggcaa	catagtgaga	900
ctccgtctct	gcaaaaaaat	wataataata	attagctggg	catggtgata	950
catacctcct	agctactagg	gcagctgaag	tggaaggatt	gcttaagccc	1000
aggaggttga	ggctgcagta	agctacaatc	acaccactat	actccagcct	1050
gggcgagaga	gcaaagccct	gtctcaaaaa	cgaaaagaaa	gtttgttata	1100
ctcacagatc					1110

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Submission no : 15
 Intron 15 : <..524
 Exon 16 : 525..642
 Intron 16 : 643..795
 Exon 17 : 796..863
 Intron 17 : 864.>

gatacctccca	ccttggcctc	ccaaagtgc	gggattacag	gcatgagcca	50
tggcatgcgg	tctcttcctg	ttcttataag	ggcactaata	ccatcatgaa	100
gtcccccatg	acctcatcta	accctagtta	cctcttaaag	gccccatctc	150
caaataccat	cccatacatg	gttagggctt	caactcatga	atttggaggc	200
gggcacaatt	tagtccataa	caaatcccct	taatcacatc	aagtaagaca	250
gagttacagg	agggtctgtg	actcctccag	ggccccattt	tcctagaagc	300
caggctaaga	gccccacgac	gcaggaacgg	ccctttctac	tcgcaaacia	350
agagaaaagc	caaggagaa	ccaacacgga	gtctggctct	gcaaaccggg	400
caggattgtt	aaagacctcc	tgggctcggg	gatgggggtg	gcggattccg	450
gctccacagc	tgcactctcc	aggggcccgt	ggctgagagg	ggggttggct	500
gtgtgtttct	tcctccccct	tcagATCCTG	ACGGGCGAAG	ACTGGAACGA	550
GGTCATGTAC	GACGGGATCA	AGTCTCAGGG	GGGCGTGCG	GGCGGCATGG	600
TGTTCTCCAT	CTATTTTCATT	GTACTGACGC	TCTTTGGGAA	CTgtatcctt	650
catggagaga	gagaagggga	caggcctgga	cctctggcag	aggagagggt	700
gcaggggctc	aagggagggt	actgagagac	ccagataccc	agggcccaag	750
tgggtgtccca	ccagtgggtg	cttttcctga	ctcagacatt	tgcagACACC	800
CTCCTGAATG	TGTTCTTGGC	CATCGCTGTG	GACAATCTGG	CCAACGCCCA	850
GGAGCTCACC	AAGgtggagg	cgggtgggaga	atgtttctct	ggcaaagtta	900
ccacctgccc	atggcagatc	aagcactttt	ttggattaac	tgagccacag	950
gaaataacat	tttcaaatag	atkaaaaaaga	tc		982

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Submission no : 16
Intron 17 : <..119
Exon 18 : 120..226
Intron 18 : 227..>

ccttgggttct	gattgggtcga	aatattttcaa	atgttgcccc	tggtcagcaa	50
cagggtcaga	agtgagtcce	caaggcctag	ttcatgtttt	gtgaacaaaag	100
attccacgtg	ccttttcagG	ACGAGCAAGA	GGAAGAAGAA	GCAGCGAACC	150
AGAAACTTGC	CCTACAGAAA	GCCAAGGAGG	TGGCAGAAGT	GAGTCCTCTG	200
TCCGCGGCCA	ACATGTCTAT	AGCTGTgtaa	gtcccctaata	ccctgggatg	250
cta~cctggc	tcctgaacgt	gtccgaccac	tatccaggca	cagattttggg	300
aagcagtggg	gggtg				314

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Submission no : 17
 Intron 18 : <..209
 Exon 19 : 210..1019
 Intron 19 : 1020..>

gcccctagcc	agggtgggagc	catggagggt	tcttgagcag	aggaggctgg	50
gacctgactc	agatgctcac	agactcctag	cattcagggtg	gggagtagag	100
ggtggagagc	aggagtggga	ggctgagatg	tgggttggtt	cgcctgggtc	150
atccatccaa	gctacagtgc	ctagcaatgc	tctaagctcc	tgtgaccatg	200
ccactgcagG	AAAGAGCAAC	AGAAGAATCA	AAAGCCAGCC	AAGTCCGTGT	250
GGGAGCAGCG	GACCAGTGAG	ATGCGAAAGC	AGAACTTGCT	GGCCAGCCGG	300
GAGGCCCTGT	ATAACGAAAT	GGACCCGGAC	GAGCGCTGGA	AGGCTGCCTA	350
CACGCGGCAC	CTGCGGCCAG	ACATGAAGAC	GCACTTGGAC	CGGCCGCTGG	400
TGGTGGACCC	GCAGGAGAAC	CGCAACAACA	ACACCAACAA	GAGCCGGGCG	450
GCCGAGCCCA	CCGTGGACCA	GCGCCTCGGC	CAGCAGCGCG	CCGAGGACTT	500
CCTCAGGAAA	CAGGCCCGCT	ACCACGATCG	GGCCCGGGAC	CCCAGCGGCT	550
CGGCGGGCCT	GGACGCACGG	AGGCCCTGGG	CGGGAAGCCA	GGAGGCCGAG	600
CTGAGCCGGG	AGGACCCCTA	CGGCCGCGAG	TCGGACCACC	ACGCCCGGGA	650
GGGCAGCCTG	GAGCAACCCG	GGTTCTGGGA	GGGCGAGGCC	GAGCGAGGCA	700
AGGCCGGGGA	CCCCACCCG	AGGCACGTGC	ACCGGCAGGG	GGGCAGCAGG	750
GAGAGCCGCA	GCGGTTCCCC	GCGCACGGGC	GCGGACGGGG	AGCATCGACG	800
TCATCGCGCG	CACCGCAGGC	CCGGGGAGGA	GGGTCCGGAG	GACAAGGCGG	850
AGCGGAGGGC	GCGGCACCGC	GAGGGCAGCC	GGCCGGCCCC	GGGCGGCGAG	900
GGCGAGGGCG	AGGGTCCCCA	CGGGGGCGAG	CGCAGGAGAA	GGCACCGGCA	950
TGGCGCTCCA	GCCACGTACG	AGGGGGACGC	GCGGAGGGAG	GACAAGGAGC	1000
GGAGGCATCG	GAGGAGGAAG	taagtggagg	tgacctcgaa	tccgcagaat	1050
gacggtaaca	ttaataatac	aacagccaaa	gtagcacgtg	ctgtgtattt	1100
gttataaaat	ata				1113

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Submission no : 18
Intron 19 : <..67
Exon 20 : 68..531
Intron 20 : 532..>

gtcctgaaac	tttgcctttt	aatcctaaat	cattgttggt	tctttttcat	50
tcacttgcc	tcctcagAGA	GAACCAGGGC	TCCGGGGTCC	CTGTGTCGGG	100
CCCCAACCTG	TCAACCACCC	GGCCAATCCA	GCAGGACCTG	GGCCGCCAAG	150
ACCCACCCCT	GGCAGAGGAT	ATTGACAACA	TGAAGAACAA	CAAGCTGGCC	200
ACCGCGGAGT	CGGCCGCTCC	CCACGGCAGC	CTTGGCCACG	CCGGCCTGCC	250
CCAGAGCCCA	GCCAAGATGG	GAAACAGCAC	CGACCCCGGC	CCCATGCTGG	300
CCATCCCTGC	CATGGCCACC	AACCCCCAGA	ACGCCGCCAG	CCGCCGGACG	350
CCCAACAACC	CGGGGAACCC	ATCCAATCCC	GGCCCCCCCA	AGACCCCCGA	400
GAATAGCCTT	ATCGTCACCA	ACCCAGCGG	CACCCAGACC	AATTCAGCTA	450
AGACTGCCAG	GAAACCCGAC	CACACCACAG	TGGACATCCC	CCCAGCCTGC	500
CCACCCCCCC	TCAACCACAC	CGTCGTACAA	Ggtgagaccc	tctgctctca	550
catcactggg	caggggacct	ggcgtcctgg	agccagaggt		590

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Submission no : 19
Intron 20 : <..75
Exon 21 : 76..217
Intron 21 : 218..>

ggagtacacc	gaggagttcc	cagagacttg	tgggaaattg	tggagggagc	50
cctgtgttgg	ttcttgtccc	aacagTGAAC	AAAAACGCCA	ACCCAGACCC	100
ACTGCCAAAA	AAAGAGGAAG	AGAAGAAGGA	GGAGGAGGAA	GAAGACGACC	150
GTGGGGGAAGA	CGGCCCTAAG	CCAATGCCTC	CCTATAGCTC	CATGTTTCATC	200
CTGTCCACGA	CCAACCCgtg	agtatggccc	ccgagcagag	ggcagggggg	250
gctgggtctc	ccaccagggg	ggcgggaannn	nnnnnnnnnn	nnnnnnnnctc	300
ccaccagggg	ggcgggaagtc	aggccagatt	agaggggcaat		340

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Submission no : 20
Intron 21 : <..97
Exon 22 : 98..227
Intron 22 : 228..>

gatctcagta	gtggtaggta	acatgagatt	atggaagaaa	agggtttgtg	50
agcctgtggt	ctgagtggac	ctctgcacgc	ccatctgtct	ccaacagCCT	100
TCGCCGCCTG	TGCCATTACA	TCCTGAACCT	GCGCTACTTT	GAGATGTGCA	150
TCCTCATGGT	CATTGCCATG	AGCAGCATCG	CCCTGGCCGC	CGAGGACCCT	200
GTGCAGCCCA	ACGCACCTCG	GAACAACgtg	agteccacag	agcacacccc	250
ttcctagcct	ggctgctctg	cctcaggcca	ctttctcctg	catccaaaat	300
gctcataggt	aggggtgggat	gttgggggtca	cccctaggca	tagcccttat	350
ggctgctggt	tgagagggga	agctctgatt	ccttggggat	gctcttggga	400
gcaagacatt	ccttgaggca	gtttctctgt	gagcctggtg	gggtggaggt	450
ggcccagagt	gactggggct	gaaaatt			477

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Submission no : 21
Intron 22 : <..33
Exon 23 : 34..93
Intron 23 : 94..>

gateccactgc	tctcttgctt	ttatccctta	cagGTGCTGC	GATACTTTGA	50
CTACGTTTTT	ACAGGCGTCT	TTACCTTTGA	GATGGTGATC	AAGgtgagtg	100
cagattataa	gtgagaacac	acggtaat	ttttttttaa	gcaagtgcag	150
ggctgggcac	agtggatc				168

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Submission no : 22
Intron 23 : <..232
Exon 24 : 233..339
Intron 24 : 340..>

gatctaagag	ccggcaagcc	agagctggct	tccatcaggc	aaaggggggc	50
cgcctcatgg	ggcaggggct	ccccactcct	ccctgggagt	cctctggcca	100
ctgcccattc	ctgcaagatg	aggtggcctc	attggettcc	ctgcctctcc	150
ccgagaggct	agagagtggg	tggcagcacc	ccaggggtggg	gatcaggtgg	200
gggttctgag	cacctctctt	tctccccccac	agATGATTGA	CCTGGGGCTC	250
GTCCTGCATC	AGGGTGCCTA	CTTCCGTGAC	CTCTGGAATA	TTCTCGACTT	300
CATAGTGGTC	AGTGGGGCCC	TGGTAGCCTT	TGCCTTCACg	taagtctctt	350
cgcaagggtt	tcctcttg				368

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Submission no : 23
Intron 25 : <..244
Exon 25 : 245..344
Intron 24 : 345..>

gatcttaacc	ccaagacact	tcatctaaag	gaaaaaactgc	cataatacac	50
agattatattt	aggtcagetc	actttactgc	catctgctgg	gaagttgtaa	100
taatacaaat	atccatacac	gatggctagg	atgttatcag	cacctccttt	150
aatgtgttgt	ccttgagcag	tgtacaacct	gctcagctgt	acatgataac	200
cctgacagtc	ccccccaccg	cacccccacca	tctcccaatc	tcacCTTGAG	250
CTTTGGCAGC	CGCTTGATGG	TTTTAAGAGG	TCGTAGCACC	CGGAGGACTC	300
GGAGGGATTT	AATCGTGTTG	ATGTCTTTTC	CTTTGCTATT	GCCActgtgg	350
aggaatgttt	aggtgggaag	aagggaagag	aggaagcaga	ggtcagggttg	400
ggtagggggc	agcccacagc	tccatggggac	cctacccttc	ccaggcctag	450
aagtctgggg	tgagcttggc	acaagcctgc	cctttcctgg	tgaagagtgg	500
tccattttac	cctgt				515

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Submission no : 24
 Intron 25 : <..67
 Exon 26 : 68..228
 Intron 26 : 229..>

ggccactgga	ggcagaaggt	tggcaggtcc	ccagccccctc	atgctctctg	50
tcaactccac	cccacagGCT	GTGTTTGACT	GTGTGGTGAA	CTCACTTAAA	100
AACGTCTTCA	ACATCCTCAT	CGTCTACATG	CTATTCATGT	TCATCTTCGC	150
CGTGGTGGCT	GTGCAGCTCT	TCAAGGGGAA	ATTCTTCCAC	TGCACTGACG	200
AGTCCAAAGA	GTTTGAGAAA	GATTGTCGgt	gggtctccgc	tttccagcac	250
attccattg	gaaccagcag	gtgggcaggg	gggaagtggc	tagaggcatt	300
ggccacttgg	gctcagagac	tggagaagtg	atgagccttg	gaagtgactc	350
agttgcaacc	agcttggatc	aagggtagaa	agaaaaccgg	ttttagaatt	400
tgagtc					406

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Submission no : 25
 Intron 27 : <..177
 Exon 27 : 178..315
 Intron 26 : 316..>
 Remark : reversed direction!

gatctcaaac	tcttggcctc	aagtgatata	tctgccttgg	cctcctaaag	50
tggttgggatt	acagggcgtga	gcaccatgcc	cggcctccaa	gaccttttctt	100
attgctaagc	tctcaggccc	tttatcctcc	tgctccccag	ggctcctcct	150
ggatagattt	ccagtcgggc	cacttacTGT	GGCCAGCCTT	CTCCCGTGGA	200
CACGGTGAAG	AGGGTCAGCA	GAGCCACAG	CACATTGTCTG	TAATGGAATT	250
CATACTTCTT	CCACTCCCGG	TCTCGCGCCT	TCACCTCATT	CTTCTCGTAG	300
AGGAGGTATT	TGCCTctgcc	acagagagtq	gggactgtta	gtaaatggga	350
aagaggggct	gtcttgcaact	tgtctttggt	tatcagagac	agggggaggg	400
aaaggaagag	tgggtccacca	ncctagactg	cttgggaagc	agtgacttcc	450
catcctgcca	ccatgtgttc	ctgtgcttca	taggggatgn	cgtgtgcaat	500
ctactttttna	ggataa				516

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Submission no : 26
 Intron 27 : <..84
 Exon 28 : 85..276
 Intron 28 : 277..>

accttcctca	tcacccttgg	gtccctgtct	ctctccttcc	tgcccccttc	50
ctctccctgc	cccattectt	gcagGGTCCT	CAAGCATTCG	GTGGACGCCA	100
CCTTTGAGAA	CCAGGGCCCC	AGCCCCGGGT	ACCGCATGGA	GATGTCCATT	150
TTCTACGTCG	TCTACTTTGT	GGTGTTCCCC	TTCTTCTTTG	TCAATATCTT	200
TGTGGCCTTG	ATCATCATCA	CCTTCCAGGA	GCAAGGGGAC	AAGATGATGG	250
AGGAATACAG	CCTGGAGAAA	AATGAGgtgc	cacttccaat	tccatctgtc	300
ctttaaaaaac	tggggacaca	cacaaacttt	aaaacacaca	caacacccag	350
gaaccccttt	ctaggggtac	ctggggggagg	gaacagaagc	attgtcccaa	400
ccgaatccag	tcttcagggc	agcccttcat	ggagtttcag	aggaaacaca	450
tcatatagtg	tatgtatcag	tcagttttaga	ctaggttat		489

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Submission no : 27
 Intron 28 : <..253
 Exon 29 : 254..418
 Intron 29 : 419..>

tagcccatgc	aanaatgggg	aaatgncagt	gcaagttttg	gcagttgntg	50
acatctcaag	caactgtanc	tgttgggata	agaaagcaat	ggtgagaagg	100
aanagaganc	ccaggaatcc	tggtctggggg	caananaggc	agagactcaa	150
gcagaagcac	ttgagaaccg	cgacgagtta	gacagagggg	gcccgggtgta	200
cagccacctt	cctcctgcct	ctgccgctct	caccactggc	ctctctccccg	250 50
cagAGGGCCT	GCATTGATTT	CGCCATCAGT	GCCAAGCCGC	TGACCCGACA	300
CATGCCGCAG	AACAAGCAGA	GCTTCCAGTA	CCGCATGTGG	CAGTTCGTGG	350
TGTCTCCGCC	TTTCGAGTAC	ACGATCATGG	CCATGATCGC	CCTCAACACC	400
ATCGTGCTTA	TGATGAAGgt	aagtgccccca	caccagcccc	cagcactant	450
taacccccac	ctcgttctctg	cctctaccct	gataaaatga	aaccatttgc	500
agattttccca	ga				512

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Submission no : 28
Intron 29 : 156
Exon 30 : 157..267
Intron 30 : 268..>

gggtcttttc	tgaactgtgc	ctcctaccag	tgaggttgct	cagaccttgc	50
ctggggctgg	agtgttgcc	ggagaacagc	catgaagctg	acctccccac	100
ttcccacttc	ccacccctgc	tcgctgaccc	ctgctactcc	tgcttctttc	150
ccctagTTCT	ATGGGGCTTC	TGTGGCTTAT	GAAAATGCCC	TGCGGGTGTT	200
CAACATCGCC	TTCACCTCCC	TCTTCTCTCT	GGAATGTGTG	CTGAAAGCCA	250
TGGCTTTTGG	GATTCTGgta	agtaccacct	tggggctaca	gctatgggct	300
tggjanaanc	ccaaggggga	acaatgggtc	ctggatgatg	gtctcccaac	350
gtggcccca	gaacccaac	ctcaaggggtg	gcttcagtat	cctgcccagt	400
ggccacagat	c				411

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Submission no : 29
 Intron 30 : <..115
 Exon 31 : 116..199
 Intron 31 : 200..>

ctgtccccggg	cactccgctg	atggggcaact	gtgcctctaa	catgcaccgg	50
ccagccctagg	gggccgggaa	ccaagccctc	tgttggcatc	tctgtcttgt	100
gggtccccc	tctagAATTA	TTCCGCGAT	GCCTGGAACA	TCTTCGACTT	150
TGTGACTGTT	CTGGGCAGCA	TCACCGATAT	CCTCGTGA	GAGTTTGGGg	200
taagtctccc	tccagcttct	ctctgggtga	ctctgggctg	gacgaggcag	250
gcggcagggg	gcgggggagc	ggccccagag	gcagtgtgtc	ccggaagcca	300
tagctgcttg	agccagcact	tggccatgac	cagagaggga	gaactggggc	350
cccggggaca	agggcagccc	ctcaggaggg	cattgtgggg	agatgggggt	400
aacaaagctt	ggctgtaggg				420

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Submission no : 30
Intron 31 : <..148
Exon 32 : 149..265
Intron 32 : 266..>

ttaatagtgc	tttctctctc	cctccttatt	tggggtctgg	cttgcctttt	50
tcctgttggg	tggcttcatg	taggggcctc	tgtgagtggg	gacagctctg	100
agcctttggg	gtgggtggat	ggtcacccct	cttccctccat	ctccccagAA	150
TAACTTCATC	AACCTGAGCT	TTCTCCGCCT	CTTCCGAGCT	GCCCCGCTCA	200
TCAAACCTTCT	CCGTCAGGGT	TACACCATCC	GCATTCTTCT	CTGGACCTTT	250
GTGCAGTCCT	TCAAGgtgag	tcctcgtccc	tgtgctggc	ccaggggctg	300
agaagacagg	tgaccctcat	gctctggctg	aatgtagaag	tc	342

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Submission no : 31
 Intron 32 : <..156
 Exon 33 : 157..222
 Intron 33 : 223..394
 Exon 34 : 395..509
 Intron 34 : 510..>

cccccaagaa	gaatgccac	caagccctgg	aaggactctg	gcacgtggca	50
tatgyccacc	caacccagt	gggcagagca	ctgggacaag	ggaggaagac	100
tgcagtgcgg	ctgagggacc	cccagcactc	ttcttcattg	ccttttttcc	150
caccagGCCC	TGCCTTATGT	CTGTCTGCTG	ATCGCCATGC	TCTTCTTCAT	200
CTATGCCATC	ATTGGGATGC	AGgtgagtgt	cgtgtcccta	aggttcccag	250
agcctcccaa	ggagggcagc	cacccttaga	aaggggtggg	tcagaggagc	300
ctgggttcaca	gaagcagcca	tggaggttga	gctgggtttc	ccagaagcca	350
ctggaggaat	ggcagccccct	ggtcgtcacc	cwmcaattcc	acagGTGTTT	400
GGTAACATTG	GCATCGACGT	GGAGGACGAG	GACAGTGATG	AAGATGAGTT	450
CCAAATCACT	GAGCACAATA	ACTTCCGGAC	CTTCTTCCAG	GCCCTCATGC	500
TCTCTTCCGg	tcagaagggg	acctgctctg	ataatnctgt	ttccgtgggg	550
tggggtgcc					559

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Submission no : 32
Intron 34 : <..94
Exon 35 : 95..245
Intron 35 : 246..>
Sequence : 316

tcagagccat	gctcactgtg	tgctccactc	ctgaggaggc	gttggtacca	50
gtcagggctg	ggtgtccgag	tctctgattt	ctccctgtcc	tcagGAGTGC	100
CACCGGGGAA	GCTTGGCACA	ACATCATGCT	TTCCTGCCTC	AGCGGGAAAC	150
CGTGTGATAA	GAACTCTGGC	ATCCTGACTC	GAGAGTGTGG	CAATGAATTT	200
GCTTATTTTT	ACTTTGTTTC	CTTCATCTTC	CTCTGCTCGT	TTCTGgtgag	250
tctgtggaca	ctgtgagggc	cgtctgggct	ccctaagcct	ggcttccttt	300
cagggagtgg	ttctgt				316

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Submission no : 33
 Intron 35 : <..211
 Exon 36 : 212..339
 Intron 36 : 340..>

gtgtagtgag	aactcacctc	tccattcccc	agtctctttc	tgtctctgtc	50
tcatttcctt	tcccatctt	ctctctatcc	ctctctccat	ctggggcctc	100
tgtgtctgtc	tttgggtctg	tctgtccgtc	tgaactgtctg	tatccttctc	150
acttcactca	ttcattccct	cggctctctgc	cccattctct	cttgggtccc	200
ggtccccaca	gATGCTGAAT	CTCTTTGTCTG	CCGTCATCAT	GGACAACTTT	250
GAGTACCTCA	CCCGAGACTC	CTCCATCCTG	G3CCCCCACC	ACCTGGATGA	300
GTACGTGCGT	GTCTGGGCCG	AGTATGACCC	CGCAGCTTGg	taagaagtca	350
ccccgaatcc	tccagccaca	atactcacct	ctccctggaa	ctggaacacg	400
ggctaggcta	ggnccccaga	ctctggagca	ctgaactcct	ggggctccta	450
gcaggggtct	cacaggttca	gtcaggagag	aagatataag	aatcatcacc	500
cttgcatacc	ccagattaaa	cacgtagggt	gccaacctgc	ccaaaccctg	550
gaggactttc	tgggaaatga	ggagggcgtc	aaccatgaga	tgtctgaaga	600
gccctctcct	cctacgagtc	tctcctgtct	ctcactgtga	agtctccaga	650
tggtaggat	cgattagcca	ggctccagga	gaaaccaaca	gact	694

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Submission no : 34
 Intron 36 : <...213
 Exon 37 : 214..310
 Intron 37 : 311..>

aagggaggtg	cctgcagtcc	cgaactcgac	tgacatccta	cacccctggg	50
tctccccagt	gtctgggaat	gtactgggaa	ttcacttgtc	cccagtctct	100
cccactcctt	gaagccaggg	acaccccagc	ctcgggcatc	atgacctcgt	150
tgtgtgcccc	gggagcccgt	gtgaacccat	tgctgcact	aaccccttt	200
cttctccttt	cagCGGTCGG	ATTCATTATA	AGGATATGTA	CAGTTTATTA	250
CGAGTAATAT	CTCCCCCTCT	CGGCTTAGGC	AAGAAATGTC	CTCATAGGGT	300
TGCTTGCAAG	gtttgacttc	cactaaaacc	tgctagcatc	catggaatga	350
gtgtggcttg	gggttcctca	atatatatat	ttcatatata	tatatatata	400
tatctctctc	tctctaaaaa	aacagagcca	tctctctttc	ttgcattaaa	450
ctagaaaact	ctcttagcca	acag			474

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Submission no : 35
Intron 37 : <..82
Exon 38 : 83..188
Intron 38 : 189..>

cctgggtagg	ggcgggcgcg	gctcacggga	gacccaggag	ggatgcctgg	50
gaatgactgc	gcttgccttg	ggttttctgt	agCGGCTTCT	GCGGATGGAC	100
CTGCCCCTCG	CAGATGACAA	CACCGTCCAC	TTCAATTCCA	CCCTCATGGC	150
TCTGATCCGC	ACAGCCCTGG	ACATCAAGAT	TGCCAAGGgt	aaggaagggga	200
caggggcggg	cacagacagg	cgtgacaggg	tggaactggg	gatctcctcc	250
ctaccccaaa	ctagaggatc	tgctgtcacc	acccggatct	tcattcactc	300
ttccattcat	tcgttccaca	ggnnnttttg	gnnnttggnn	ntttggtggt	350
tttttttttt	ttttgagaca	gagtccttgct	ctgttgccca	ggcagcagtg	400
cggtgacatg	atc				413

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Submission no : 36
 Intron 38 : <..96
 Exon 39 : 97..204
 Intron 39 : 205..369
 Exon 40 : 370..470
 Intron 40 : 471..>

gggtctcgtt	ctcgggagcc	tatggctttg	cagctgaccc	agagtccagc	50
tgacaccag	gcaggcagtc	agggctctgtc	tacaccccca	ttgcagGAGG	100
AGCCGACAAA	CAGCAGATGG	ACGCTGAGCT	GCGGAAGGAG	ATGATGGCGA	150
TTTGGCCCAA	TCTGTCCAG	AAGACGCTAG	ACCTGCTGGT	CACACCTCAC	200
AAGTgtaaga	gctgagccca	gccctgggat	ccaatccacc	aggacagatg	250
gag_gggagg	gaaaggggag	gcctggggag	agtgttggct	gggctgggtat	300
acacagggac	ccaggacaag	gtccccaaag	angcctgccc	ttggtgagct	350
caccgtgtgt	gtccccagc	CACGGACCTC	ACCGTGGGGA	AGATCTACGC	400
AGCCATGATG	ATCATGGAGT	ACTACCGGCA	GAGCAAGGCC	AAGAAGCTGC	450
AGGCCATGCG	CGAGGAGCAG	gtgcgtgtt	cgcgctctg	gggacatctg	500
ggctggggac	agtggcttgc	atgtcaccac	gggaaccaac	tggaatatga	550
gggtggctga	gcccagggc	aggtccctga	aaagttagggg	ctggtgcaca	600
gcagctcaca	cctgcaatct	cagtgccttg	agaggc		636

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Submission no : 37
 Intron 40 : <...407
 Exon 41 : 408..517
 Intron 41 : 518..625
 Exon 42 : 626..764
 Intron 42 : 765...>
 Sequence : 829

gatcttccagg	gccatgggag	ctgcaggaag	gactctggct	ttttcccca	50
gcaagtggga	gccatggagg	gttctaagca	aaggagggat	aggacctgac	100
tcaagtgtc	atgggcgccc	tctgggtggct	cttgtggaac	agtgggggtg	150
aaggtaggag	cgggagacct	gggagaaggt	gcctgcagtg	agagatgagg	200
acgcgggacc	aggctggggc	tatgacttgg	gtggaggagt	gagaagtgg	250
ccagttctgc	gtggaattgg	aagggtctag	atggatgaga	cctgagagag	300
tgtgtgtgtg	tgtgtgtgtg	tatactggg	atgtcgcaat	gccttctggg	350
taccaccgtc	caccacccca	cccttgtcca	cacactgtc	tctgccccat	400
tccccagGAC	CGGACACCCC	TCATGTTCCA	GCGCATGGAG	CCCCCGTCCC	450
CAACGCAGGA	AGGGGGACCT	GGCCAGAACG	CCCTCCCCTC	CACCCAGCTG	500
GACCCAGGAG	GAGCCCTgtg	agtgtcacc	ctgccaggga	ggtggagtgt	550
gggggtgccg	tggccccac	gttctggaag	ctgcccagc	gcccactgct	600
acccccggcct	ctgtccccc	tgcagGATGG	CTCACGAAAG	CGGCCTCAAG	650
GAGAGCCCCGT	CCTGGGTGAC	CCAGCGTGCC	CAGGAGATGT	TCCAGAAGAC	700
GGGCACATGG	AGTCCGGAAC	AAGGCCCCCC	TACCGACATG	CCCAACAGCC	750
AGCCTAACTC	TCAGgtgcct	ctgtccccc	actccccaat	ggctcccagg	800
gcccgggtgg	ttgcggtgga	aggaaccat			829

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Submission no : 38
Intron 42 : <..219
Exon 43 : 220..333
Intron 43 : 334..>

tcactgcaac	ctccaccttc	cagtctcaag	tgattcctcc	tgcctcagcc	50
tcccaagtea	ctggattaca	ggcgcccacc	accatgctca	ggatattttt	100
tttgatattt	tagtagagac	ggggtttcac	aatgttggtc	aggctgggtc	150
cgaactgctg	nccattgtga	tctggagggtc	aggccccaga	gctcatctgg	200
ctttgccatt	cgtccgcagT	CCGTGGAGAT	GCGAGAGATG	GGCAGAGATG	250
GCTACTCCGA	CAGCGAGCAC	TACCTCCCCA	TGGAAGGCCA	GGGCCGGGCT	300
GCCTCCATGC	CCCGCCTCCC	TGCAGAGAAC	CAGgtgaggg	ctttcaccac	350
tgccctgggg	ctggacccct	cactctgcac	tgggtagggc	caggcccccc	400
cacaagcagc	ccagtgcac	ccctcctgcc	ggactcaggc	ctgggtaggg	450
actccttcag	tctctgaagc	agtctgcagg	ccccaccac	cacctgggtca	500
cacctggagc	acctgcagac	cctcctccct	cacagaggac	agagaggaaa	550
gtgctccccc	tggggcagag	ggcagtggcc	actgcaaaat	ggtctctggc	600
tgccctgggt	ggaggctgca	gacaggggag	gttggtggaar	atttggtgggt	650
gcagcaggggt	tcaacagggc	cagctgagac	ctgccacgaa	gawccctttga	700
ggccaggagt	ttgagaccag	gttgggcaac	atagcaaaac	cctgtctctt	750
tttttttttt	gagacggagt	ttcactcttg	ttgcccagag	ctggagtgac	800
a					801

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Submission no : 39
Intron 43 : <..83
Exon 44 : 84..119
Intron 44 : 120..>
Sequence : 329

cctcctcaact	cttcctctctt	gcctttatat	ttattttcttt	ctttctgttt	50
tttctgtgtg	caccatccat	ggggctgtga	cagAGGAGAA	GGGGCCGGCC	100
ACGTGGGAAT	AACCTCAGTg	tatgtacggc	ctgcccaggg	cccagcaggc	150
tccggccccc	tcttctctccc	caccccnctt	ccaggagtc	ccgtaatctc	200
taccgggtccc	cggacccccc	cctttctttg	gcaatcgcac	cctctccccc	250
ccatggagcc	caatccttgt	gtgtggtgtc	ctgtgtgtgc	cctgacccat	300
aagcctggtg	gggcggccat	ccccatcct			329

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Submission no : 40
Intron 44 : <...166
Exon 45 : 167..353
Intron 45 : 354..>

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gatc					554

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Submission no : 41
Intron 45 : <..31
Exon 46 : 32..285
Intron 46 : 286..>

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Submission no : 42
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Exon 47 : 280..>
Stop codon : 280..282
UTR 3' : 283..>

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ccccctcctc	cctctcctcc	cgccccctct	cccttcgctc	ccctcatctt	200
cctcccaatc	ccgtgtctcc	tttgattttg	ttgtatcttt	ttttttgatt	250
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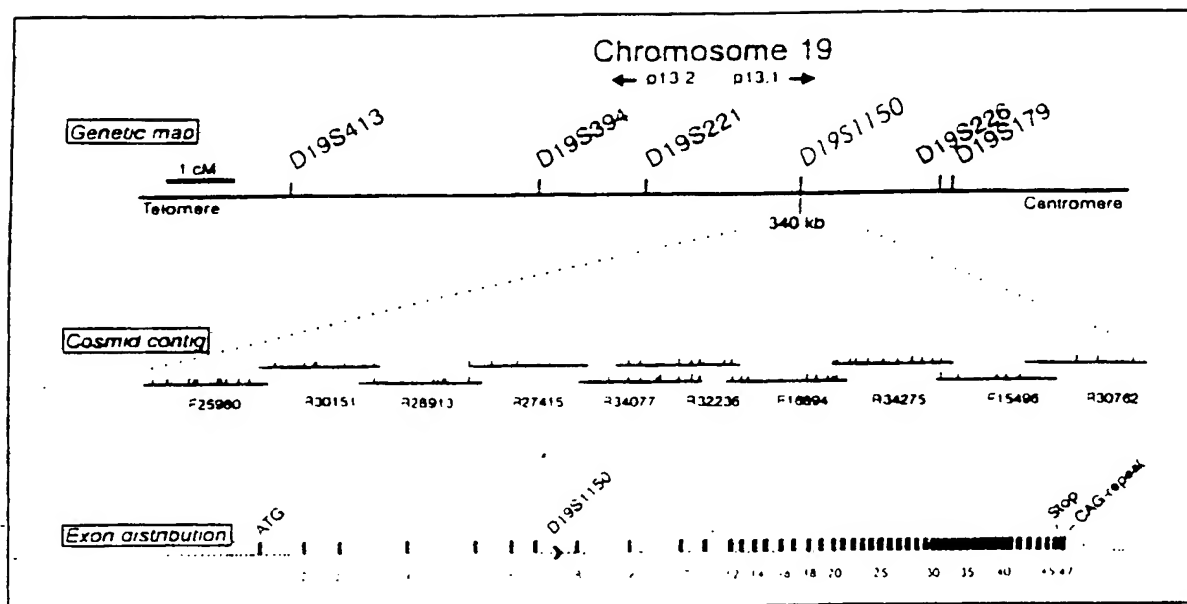


Fig. 2

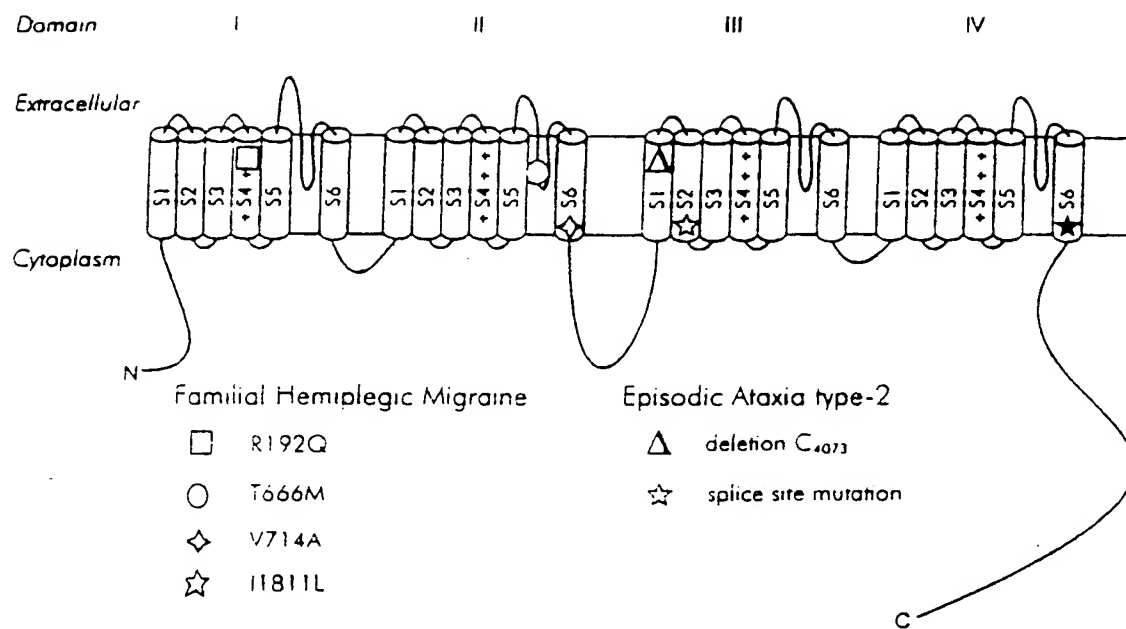


Fig. 3

Figure 4

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